



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,880	07/31/2003	Richard Allen Hayes	AD6889 US NA	1805
23906	7590	10/17/2005	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			BOYKIN, TERRESSA M	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 10/17/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/631,880	Applicant(s) HAYES, RICHARD ALLEN	
	Examiner Terressa M. Boykin	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-98 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/05/14</u> . | 6) <input type="checkbox"/> Other: _____ |

10

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-98 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 4328333 ; see cols. 1- 4, examples 1-2, Table 1, claim 8.

The **USP 4328333** discloses copolyesterethers that can be formed into bottles, tubing, film and the like having improved clarity. The copolyetheresters have an inherent viscosity of from 0.8 to about 2.0.

The copolyetheresters disclosed have an inherent viscosity of from 0.8 to about 2.0 and comprises:

A. a dicarboxylic acid component consisting essentially of terephthalic acid and an aliphatic or cycloaliphatic acid, and

B. a diol component comprising

(1) at least 70 mole percent 1,4-butanediol, and

(2) from about 10 to about 60 weight percent, based on the weight of the polyetherester, of polypropyleneether glycol having a molecular weight of 1700 to 2400.

As used herein, the inherent viscosity (I.V.) is measured at 25 C. using 0.50 gram of copolyester per 100 ml. of a solvent consisting of 60 percent by weight phenol and 40 percent by weight tetrachloroethane.

The reference states that the term "consisting essentially of" is intended to include small amounts of other acids or glycols, e.g., up to about 5 mole percent. The reference also discloses that the diol component of the copolyesterether may also contain up to about 30 mole percent of a second low molecular weight glycol having 2 to 5 carbon atoms. If a second low molecular weight glycol is used, it is preferably ethylene glycol, 2,2-dimethyl-1,3-propanediol or mixtures thereof.

The reference further states that the copolymer may also contain from about 0.1 to about 2 mole percent of a conventional branching agent. The branching agent may be either tribasic acids, such as trimellitic anhydride or trimesic acid, or polyhydric alcohols, such as pentaerythritol, trimethylol propane, or polyoxypropylene ether triol.

Note that the reference discloses that the properties of these copolyesterethers can also be modified by incorporation of various conventional additives such as carbon black, silica gel, alumina, clays, chopped fiber glass and mold release agents. In general, these additives have the effect of increasing the modulus of the material at various elongations. Compounds having a range of hardness values can be obtained by blending hard and soft polymers of this invention. Additionally, if desired, stabilizers may be added.

Note also with regard to applicants claims regarding films, foams, sheets etc. note, table 1 and claims 8 and 9 of the reference. Note also, that the particles required for the solid phase polycondensation can be formed by any conventional techniques. The partially condensed material from the melt can be cooled by casting on a cold wheel and shredding the resulting sheet. copolyesterethers then may be formed into bottles,

tubing, film and the like having improved clarity.

In view of the above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is (571-272-1700).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1711

Tmb

A handwritten signature in black ink, reading "Terressa Boykin". The signature is written in a cursive, flowing style with a large initial 'T'.

Examiner Terressa Boykin
Primary Examiner
Art Unit 1711